Final Project Assignment

Overview:
The goal of the final project is for learners to demonstrate their mastery of the core concepts taught in this course. We will use the same group of topics as the midterm assignment, but you're not going to do this final project on the same topic as your midterm. You'll give an in-class presentation of 20 mins followed by 20 mins of Q&A / comments. **Make sure to cover each of the following parts in your presentation**.

Part 1: Problem Definition
Come up with a clinical scenario that would use your assigned topic and design and develop a new informatics intervention to help solve a problem in that topic, according to your clinical scenario. Don't pick something you've built before. Describe the problem and include the appropriate SWOT analysis, needs analysis, workflow diagrams, process diagrams, etc. to further describe the problem, as well as overview of existing solutions to the problem.

Part 2: Requirements Gathering
In this part, you should begin to scope out your solution to the problem with focus on what's needed for people to interact with your system. What kinds of people will use your solution? What will they do with it? What information they will they need to gather and store? What requirements will they have for analysis? How are they going to handle information sharing?

Part 3: System Design
Take your requirements and turn them into your solution. Based on strategic planning for Clinical Information Systems, give a detailed yet concise description of all the components. Pay particular attention to: Architecture of Systems, Data Management, Clinical Data Standards, Interoperability Standards, Process engineering, Clinical workflow, Leading and Managing Change, Health economics and Regulatory Framework, Governance and Sustainability.
Please include a diagram of your design. Try to reflect as many of the considerations listed above in an organized manner.

Part 4: Analytics
Describe the procedures you would use to conduct the evaluations, including any implications for how you would roll out your solution. Identify specific measurements you would use, including at least one qualitative measurement. Describe the data you would collect with the time-points when you would collect it and describe how you would analyze such data.

Part 5: Build it
The project should at the minimum be a wireframe prototype. For extra credit, build the system you propose. For example, a complete system with a web front end.

Teams will be scored by faculty and other learners: 20 points -maximum score- for each of these parts out of 100 total.